NUMB. XXX.

The Universal Instructor in all Arts and Sciences:

AND

PENNSYLVANIA GAZETTE

To be continued Weekly. *The 24th of the 5th Month*, 1729.

AIR

WE have here, therefore, not only the Materials whereof *Air* should be made; but the Means of doing it: with regard to which, the *Air* is divided into *real* or *permanent*, and *apparent* or *transient*. For, that all which appears to be *Air* does not continue such, is evident from the Instance of an Æolipile [*an Hydraulick Instrument consisting of a metalline Ball with a slender Neck or Pipe arising from the same,*] which being fill'd with Water, and the Water being sufficiently rarefy'd by the Fire, rushes out in a sharp whistling Blast, perfectly resembling *Air*, while the Motion lasts; but soon loses that resemblance, especially in the Cold, and returns by Condensation into its original Water: And the same may be observed of Alcohol or purest Spirits of Wine, and other subtile or fugitive Spirits rais'd by Distillation. Whereas *real Air* is not reducible by any Compression, Condensation, or the like, into any other Substance beside *Air*.

Water, then, tho' it may put on an *aerial* Nature for a while, yet is not capable of persisting therein: And the same may be said of other Fluids. The furthest they go, is to become Vapour; which is the Matter of the Fluid render'd much rarer, and put in a brisk Motion. For a Substance to become *permanent Air*, it must be of a fixed Kind; otherwise it is not capable of undergoing the Alteration necessary to be induced in it; but gives way, and flies off too soon. So that the Difference between *permanent* and *transient Air* amounts to the same as that between Vapour and Exhalation, the one being dry, the other moist.

We can go a little further yet. This Elastic Property of Air is supposed by many Philosophers to depend on the Figure of its Corpuscles, which they suppose to be ramous: Some will have 'em so many minute Floculi, resembling Fleeces of Wool; others conceive 'em roll'd up like Hoops, and curled like Wires, or Shavings of Wood, or coil'd like the Springs of Watches; and endeavouring to restore themselves in Vertue of their Texture; so that to produce *Air* must be to produce such a Figure and Disposition of Parts; and those Bodies only are proper Subjects, which are susceptible of such Disposition; which, Fluids, from the Smoothness, Roundness, and Slipperiness of their Parts are not.

AIR

But Sir *Isaac Newton* puts the Thing another way; such a Texture he thinks by no Means sufficient to account for that vast Power of Elasticity observed in *Air*, which is capable of diffusing into above a Million of Times more Space than it before possess'd. But as all Bodies are shewn to have an attractive and a repelling Power, and as both these are stronger in Bodies, the denser, more solid and compact they are: Hence it follows, that when by Heat, or any other powerful Agent, the attractive Force is surmounted, and the Particles of the Body separated so far as to be out of the Sphere of Attraction; the repelling Power commencing thence, makes 'em recede from each other with a strong Force, proportionable to that wherewith they before coher'd; and thus they become *permanent Air*. Hence, says the same Author, it is, that as the Particles of *permanent Air* are grosser, and arise from denser Bodies than those of *transient Air*, or Vapour; true *Air* is more ponderous than Vapour; and a moist Atmosphere lighter than a dry one.

But, after all, there may be still Reason to doubt, whether the Matter thus produced from solid Bodies, have all the Properties of *Air*; and whether such *Air* be not transient, as well as that from humid ones; tho' not to that Degree. Mr. *Boyle* argues, from an Experiment made in the *Air*-Pump with lighted Match, that those light and subtile Fumes into which the Fire it self shatters dry Bodies, have no such Spring as Air; since they were unable to hinder the Expansion of a little *Air* included in a Bladder they surrounded. Yet, in some subsequent Experiments, by dissolving Iron either in Oil of Vitriol and Water, or in Aqua-fortis; a large *aerial* Bubble was produced, which had a real Spring; so as to hinder the surrounding Liquor from regaining its Place; and which, by the Application of a warm Hand, readily dilated it self like other *Air*, and broke into the Liquor in several succeeding Bubbles; and even thro' the Liquor into the open *Air*,

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In our last, we left our Gentleman discoursing by Way of Dialogue: they now proceed,

Landl.

Landl. Poor *William!* thou art more thankful for thy Cottage, than ever I was for the Manor-houſe; prithee, *William*, can you tell me how to be thankful too?

Will. *And't pleaſe your Worſhip, I don't doubt but you are more thankful than I; you have a vaſt Eſtate, and are Lord of all the Country, I know not how far; to be ſure you are more thankful than I.*

Land. *I ought to be ſo, you mean,* William, *I know That; for it all comes from the ſame Hand.*

Will. *I don't doubt but you are very thankful to God, and't pleaſe you, to be ſure you are; for he has given your Worſhip great Wealth;* and where much is given, *you know, and't pleaſe you,* much is requir'd; *to be ſure you are much more thankful than I.*

Land. *Truly,* William, *I'd give a Thouſand Pound I were as happy and thankful as thou art: Prithee,* William, *tell me, how I ſhall bring my ſelf to be thankful; for tho' thou art a poorer Man, I believe thou art a richer Chriſtian than I am.*

Will. *O! and't it pleaſe your Worſhip, I cannot teach you; I am a poor labouring Man, I have no Learning.*

Landl. *But what made you ſo thankful,* William, *for little more than Bread and Water?*

Will. *O, Sir, and't pleaſe you, my old Father uſed to ſay to me, that to compare what we receive with what we deſerve, will make any body thankful.*

Landl. *Indeed that's true,* William: *Alas, we that are Gentlemen, are the unhappieſt Creatures in the World; we can't quote our Fathers for any thing that's fit to be nam'd? Was thy Father as thankful as thou art,* William?

Will. *Yes, and't pleaſe you, Sir, and a great deal more: O! I ſhall never be ſo good a Chriſtian as my Father was.*

Landl. *And I ſhall never be ſo good a Chriſtian as thou art,* William?

Will. *I hope you are, and't pleaſe you, much better already; God has bleſt your Worſhip with a vaſt great Eſtate, and if he give you Grace to honour him with it, he has put Means in yonr Worſhip's Hands to do a great deal of Good with it.*

Landl. *But you have a better Eſtate than I,* William.

Wil. *I an Eſtate! and't pleaſe you! I am a poor labouring Man; if I can get Bread by my Work, for my poor Children, it is all I have to hope for on this Side Eternity.*

Landl. William! William! *Thou haſt an Inheritance beyond this World, and I want that Hope; I am very ſerious with thee,* William: *Thou haſt taught me more this one Night of the true Happineſs of a Chriſtian's Life than ever I knew before: I muſt have more Talk with thee upon this Subject; for thou haſt been the beſt Inſtructor ever I met with.*

Will. *Alas! Sir, I am a ſorry Inſtructor, I want Help my ſelf, and't pleaſe you, and ſometimes, the Lord knows, I am hardly able to bear up under my Burthen; but bleſſed be God, at other times, I am comforted, that* my Hope is not in this Life.

Landl. I *tell thee,* William, *thy Eſtate's better than all mine; thy Treaſure is in Heaven, and thy Heart's there too; I would give all my Eſtate to be in thy Condition.*

Will. *O Sir, I hope your Worſhip is in a better Condition than* I, *every way.*

Landl. *Look you,* William, I *am very ſerious with thee; thou knoweſt how* I *have been brought up, for you remember my Father very well.*

Wil. *Yes,* I *do indeed; he was a good Man to the Poor;* I *was the better for him many a Day; he was a worthy Gentleman.*

Landl. *But* William, *he never took any Care of us, that were his Children, to teach us any thing of Religion; and this is my Caſe, as it is the Caſe of too many Gentlemen of Eſtates; we are the unhappieſt Creatures in the World, we are taught nothing, and we know nothing, of Religion, or of him that made us; 'tis below us, it ſeems.*

Will. *'Tis great Pity indeed,* and't pleaſe you, *but* I *know it is ſo too often: There's young Sir* Tho. ----------, *your Worſhip's Couſin, he is a pretty Youth, and may make a fine Gentleman; but tho' he is but a Child, he has ſuch Words in his Mouth, and will ſwear ſo already, it grieves me to hear him ſometimes.* It's *true, his Father is dead; but ſure if my Lady knew it, ſhe would teach him better; it's Pity ſo hopeful a young Gentleman ſhould be ruined.*

La. *And who do you think ſpoiled him?*

Will. *Some wicked Children, that they let him play with,* I *believe, or ſome looſe Servants.*

La. *No, no,* William, *only his own Father and Mother;* I *have heard his Father take him when he was a Child, and make him ſpeak lewd Words, and ſing immodeſt Songs, when the poor Child did not ſo much as know the Meaning of what he ſaid, or that the Words were not fit for him to ſpeak: And you talk of my Lady! why ſhe will ſwear and curſe as faſt as her Coachman; how ſhould the Child learn any better?*

Will. *O dear, that is a dreadful Caſe indeed! then the poor Youth muſt be ruin'd of Neceſſity; there's no Remedy for him, unleſs it pleaſes God to ſingle him out by his inviſible Grace.*

Landl. *Why his Caſe,* William, *is my Caſe, and the Caſe of half the Gentlemen in* England; *what God may do, as you ſay, by his inviſible Grace,* I *know not, nor ſcarce know what you mean by that Word; we are from our Infancy given up to the Devil, almoſt as directly, as if we were put out to nurſe to him.*

To be continued in our next.

FOREIGN AFFAIRS.

Amſterdam, April 29. From Malta we have received the Particulars relating to the Capture of La Gazella, or the Antelope, a Cruizer of Algiers, by the St. Vincent, a Malteſe Man of War, commanded by Chevalier Deoulx, *viz.* The Algerine Cruiſer went to Tripoli, in Order to diſguiſe himſelf as a Tripolin, and make Advantages of the War that Regency was carrying on againſt the French; but finding the Divan determine to accommodate Matters with the Court of France, he quitted Tripoli March 23. and was returning to Algiers. The ſame Day he met the Chevalier Deoulx cloſe under the Iſland Lampadoſa. Upon this Rencounter the Algerine hoiſted Dutch Colours; and the Mal-

Malteſe hung out Engliſh feigning a Flight, in order to decoy out the Corſair; who accordingly gave him brisk Chaſe, and when got within Gunſhot hung out Algerine Colours, as did the Chevalier thoſe of his Order, and ſent the Chaſer a Shot as a Token. Hereupon the Algerine (all whom dread the Malteſes more than they do the Devil) turned Tail with Precipitation; and by crowding too much Sail ſprung his Main-Top Maſt; which Accident was very favourable for the Chevalier, who otherwiſe would never have come up with the Corſair, whoſe Ship was freſher careened. The 24th at 5 in the Afternoon, the Fight began, and laſted till dark Night, when they gave over, and lay by. At Day-Break the Firing re-commenced, and with ſuch Fury from the Malteſe, that at length the Algerine was forced to a Surrender. His Ship was mounted with 46 Guns, but could carry 50, and her Equipage conſiſted of 357 Men, of which 178 were killed outright, and 33 wounded. The Chevalier had only Four Men killed and 14 wounded during this warm Engagement which laſted eleven Hours, in which ſpace the Malteſes fired 1164 great Shot. This Action was by ſo much the more honourable to the Order and this Chevalier, as the Corſair was ſuperior both in Artillery and Equipage to the Malteſe, whoſe Ship carried only 40 Guns, and 250 Men. Aboard the Prize which was conducted ſafe to Malta, were 25 Chriſtian Captives, among whom were ſome French, purchaſed by the Algerine Captain at Tripoli, and which are ſince ſent to France, as the reſt where they thought proper.

Copenhagen, April 26. All Hands are now buſily employed in Order to render this Capital (from a Heap of Rubbiſh as the Flames had left it) a beautiful City on which his Majeſty is particularly attentive. At Lockerup, near Helſingneut, will ſpeedily be eſtabliſhed a Manufacture for curing and dreſſing Leather like that of Ruſſia, under the Direction of a Saxon who ſerved the Ruſſian Crown twelve Years in that Capacity: Three Noblemen of the firſt Rank will advance the Coſts of this Undertaking, from whence, they hope, very conſiderable Advantage will accrue. Thoſe Noblemen are to have half the Profit, and the other Moiety is for the Manager.--- From *Moſco*, we hear, That they are informed from *Derbent*, of a Gold Mine juſt diſcovered on a Mountain about 3 Leagues from *Androff*.

Paris, May 6.

On Monday Night about Eleven o'Clock, the Cardinal de Noailles was ſeized with a ſort of Apoplectick, or rather a Fainting Fitt, proceeding from a Decay of Nature; there was not Time to adminiſter all the Rites of the Roman Church; but they gave him the extreme Unction. He remain'd in this Condition till Tueſday Morning Eleven o'Clock, when he was judg'd to be ſomewhat better; the Sacrament having been expoſed, and Prayers order'd for his Recovery, at Five that Morning in our Cathedral, and ſoon after in all the other Churches of this City. However, early in the Afternoon his Spirits fail'd him again, ſo that he expired between Two and Three on Wedneſday Morning. Yeſterday his Corpſe was embalm'd; and this Day his Heart is to be carry'd to St. Cloud, and his Bowels to the Church of Calvary near Surreme, whither his Eminency was wont to go now and then for Retirement; and to-morrow at Ten o'Clock his Body is to be interr'd in his own Chappel at our Cathedral, or (as ſome ſay) in that of Our Lady there. Yeſterday died alſo his Eminency's Gentleman, in the 50th Year of his Age.

We expect every Minute News that the King of Spain will cauſe the Effects of the Galleons to be deliver'd. We ſee here a Liſt of the Naval Force of Spain, *viz.* 17 Ships of War at Cadiz, 4 in America, and 4 in Biſcay, making in all 25 Sail. The laſt Letters from Madrid adviſe, that the Duke de Bournonville was on his Departure to the Congreſs of Soiſſons; and that they had reaſon to hope that the Propoſitions he is to be charged with, by his Catholick Majeſty, will procure us a Peace ſo ardently deſired.

Albany, July 10.

Laſt Night about 12 a Clock a Fire broke out in a Bakers Houſe in this City, and with great Violence burnt down ſeven Houſes and deſtroyed great Part of the Goods and Merchandize therein. And there is about 17 or 18 Houſes more that are in great Part deſtroyed by being pulled down and broke, in order to ſtop the Fury of the Fire.

New-York, July 10.

We have an Account from Jamaica, that Capt. Leycraft being bound out to the Spaniſh Coaſt with a ſuitable Cargo of Negroes and dry Goods, as he was ſaluting the Fort at his going out, his Powder-Room took Fire and blew him up. Capt. Leycraft and his Mate are much mortified, but ſaved their Lives by getting Hold of ſome Part of the Wreck; but above fifty Souls were loſt.

London, May 2.

The Oxford Man of War, Lord Vere Beauclere, now at Portſmouth, is bound for Newfoundland, to protect the Fiſhery this enſuing Seaſon.

Yeſterday the Grand Jury met at Guildhall, and found a Bill of Indictment for the Murder of Mr. Arn, the Undertaker in the Fleet-Priſon, againſt John Huggins, Eſq; and James Barnes. After which the Grand Jury was diſcharged. The Keeper of Newgage has cauſed Mr. Huggins to be put in Irons, and ſet a double Guard over him.

The ſaid Keeper is ordered to carry Huggins and Bambridge to the Bar of the Houſe of Commons, to be further examined.

This Week arrived here a Gentleman diſpatched by his Excellency Abraham Stanyan, Eſq; Ambaſſador at the Ottoman Port, with a Letter from the Grand Seignior, to congratulate his Majeſty on his Acceſſion to the Crown.

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A few Days ſince came on before the Lord Chief Juſtice Raymond, at Weſtminſter, the Tryal of Japhet Crook, alias Sir Peter Stranger, upon an Indictment for forging two Deeds of Conveyance to himſelf of an Eſtate in Eſſex belonging to Mr. Joſeph Garbutt, and afterwards mortgaging the ſame as his own Eſtate for 4500 l. After a hearing of about 4 Hours, the Jury brought him in guilty of the Indictment: Which being grounded on a Statute of Q. Elizabeth, he is to be put in the Pillory, and to have both his Ears cut off, his Noſtrils to be ſlit, and to ſuffer peretual Impriſonment.

A Perſon in this City who had a Mind to put a Trick upon a Porter for his being affronted by him, contriv'd the following Peice of Revenge; He gets a large Earthen Jar, which he caus'd to be fill'd with Human Ordure, and being cloſe ſtopt, the Porter was ſent for, and ſtrictly charg'd to take ſpecial Care to carry the Jar to a Place appointed, where he was to be paid upon Delivery thereof. The Porter carefully takes up his Burden upon his Knot, it being a good Load, and marches very gravely along with the precious Treaſure; when juſt turning the Corner of an Alley he was to paſs thro', it being in the Dusk of the Evening, a third Perſon who was in the Contrivance, with a great Stick or Stone breaks the Jar all to Pieces, upon the Porters Shoulders, and immediately makes off, and leaves the poor Porter, all over, from Head to Foot in a moſt filthy Pickle.

We have Advice from Maryland, That a Motion being made in the Houſe of Repreſentatives, Whether a Bill ſhould be brought into the Houſe for making a Paper-Currency, and it being put to the Vote, it was carried in the Affirmative, by a conſiderable Majority.

We hear that the Right Hon. the Lord Mayor having received a Letter from the Archbiſhop of Armagh, acquainting him with the miſerable Condition of the Poor in the North of Ireland for Want of Corn, and of a Subſcription having been ſet on Foot in that Kingdom, for purchaſing a ſufficient Quantity, in order to it's being ſold them at a moderate Price; his Lordſhip has communicated the ſame to the Companies of this City, which are Proprietors of Land in that Iſland, and we hear that they will ſubſcribe 1200 l. to that Fund.

Extract of a Letter from Rome. Apr. 2. N. S.

The Chevalier de St. George is very aſſiduous at the Aſſemblies, and at the Churches where Expoſition is made of the Holy Sacrament: But we do not obſerve many Political Councils held at his Palace. We are aſſured, that the Pope, ſome Cardinals, and ſeveral of this Chevalier's Engliſh Adherents have raiſed a Fund of Four Millions to defray, when Occaſion ſhall offer, the Expence of ſome Expedition in his Favour.

Entred Inwards, July 24. 1729.

Boat *Anne, John Gano,* from *New-York.*
Ship *Hopewell, Stephen Haven,* from *Belfaſt.*
Sloop *Anne, Barth. Voke,* from *Jamaica.*
--- *Rebecca, Stephen Thompſon,* ditto.

Entred Outwards.

Brig. *Hopewell, Stephen Haven,* for *S. Carolina.*

Cleared.

Sloop *Samuel, Wil. Mercott* for *Annapolis.*
Ship *Flaxney, Edward Bourne,* to *Madera.*
---- *Dorothy, Robert Scot,* to *Jamaica.*
Brig. *Clementina, Joſ. Arthur,* to *Antegoa.*
Sloop *Hope, Richard Mullington,* to *Cape Fear.*
Boat *Anne, John Gano,* to *New-York.*
Brig. *Philadelphia-Hope, Geo. Spafford* to *Barbadoes.*
Brig. *Endeavour, Thomas Bowling,* to *Leverpool.*

SUNDRY Houſes, Lots, and Tracts of Land to be ſold by *Benjamin Vining, viz.*

In Salem County.

On the Branches of *Alowαys* Creek 1000 Acres, 10 Miles from *Salem.*

North Side of *Alowαys* Creek, 500 Acres, 4 Miles from Town.

Manaton Plantation, Houſe, Barn, *&c.* and the half of a Mill, containing 224 Acres 2 Miles off.

A Houſe and Lot in *Salem* fronting *Bridge-ſtreet,* 16 Pole and half.

The Reverſion of another in the ſame Place, with 8 Acres of Ground, and a Warrant for the taking up 1000 Acres in the Jerſeys, *Indian* Purchaſe paid.

In *Pennſylvania.*

A Houſe and Lot at *Marcus* Hook, where *Ralph Hoy* lives, together with two Acres of Woodland; and another Acre Lot near the Church, at ſaid Hook.

500 Acres Land in two Tracts, in the County of *Philadelphia,* near *Perkiomen,* a Houſe and Lot in *Cheſnut-ſtreet,* Two in the Front-ſtreet, Three City Lots not fenced.

At *Wickaco,* Forty odd Acres Land and Meadow at the Cave; both off the Road, not a Mile from the City.

Another Square-field on *Miamenſack* Road, oppoſite to *Philip Johns,* half a Mile by the ſaid City. Enquire of the ſaid *Benjamin Vining.* Alſo the Plantation whereon he lives, 2 Miles from *Salem,* 1000 Acres within natural and acquired Fence.

To be ſold,

A certain Tract of Land containing 1500 Acres lying on the Weſt-Side the King's Road from *Newcaſtle,* to *Andrew Peterſon's,* joining to ſaid Road, and to Col. *Harman's* Mannor, and to the Lower Side of the *Welch-Tract,* on the Head of Back-Creek. And in *New-Jerſey,* on the South Branch of *Rarington* River, at a Place called the *Long Valley,* 9000 Acres of Land with good Meadows, with ſeveral other Parcels of Land in *Hunterdon*-County in ſeveral Places. And by the Sea-Coaſt of *New-Jerſey* in *Burlington* and *Glocester* Counties, ſeveral Tracts of Land and Marſhes. And ſeveral Tracts of Land in the County of *Gloſter* and *Cape-May* Counties. Thoſe that incline to purchaſe any of the Land aforeſaid, may treat with *John Budd* at *Philadelphia,* or in his Abſence with *Humphrey Murrey,* or *Edward Shippen,* who are impowered to ſell at reaſonable Rates.

ALL Perſons indepted to *Samuel Keimer,* are earneſtly deſired to ſend in or bring their ſeveral Payments, in Order to enable him to do ſpeedy Juſtice to his Creditors, and thereby prevent his having any additional Trouble.

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